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Barriers to and facilitators of advance care planning implementation for medical staff after the COVID-19 pandemic: an overview of reviews

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ABSTRACT

Objective The COVID-19 pandemic has impacted the capacity for advance care planning (ACP) among patients, families and healthcare teams. We sought to identify and review the barriers to and facilitators of ACP implementation for medical staff in different settings (eg, hospitals, outpatient palliative care, nursing and care homes) during the pandemic.

Design This study employed an overview of reviews design. We searched the MEDLINE, CENTRAL, Web of Science and Embase databases for studies published between 8 December 2019 and 30 July 2023. We used AMSTAR 2 to assess the risk of bias.

Results We included seven reviews. Common barriers to ACP implementation included visitation restrictions, limited resources and personnel and a lack of coordination among healthcare professionals. In care and nursing homes, barriers included a dearth of palliative care physicians and the psychological burden on facility staff. Using telemedicine for information sharing was a common facilitator across settings. In hospitals, facilitators included short-term training in palliative care and palliative care physicians joining the acute care team. In care and nursing homes, facilitators included ACP education and emotional support for staff.

Conclusions Visitation restrictions and limited resources during the pandemic posed obstacles; however, the implementation of ACP was further hindered by insufficient staff education on ACP in hospitals and facilities, as well as a scarcity of information sharing at the community level. These pre-existing issues were magnified by the pandemic, drawing attention to their significance. Short-term staff training programmes and immediate information sharing could better enable ACP.

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STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ Preferred Reporting Items for Overviews of Reviews guidelines were followed with a pre-registered study protocol.
⇒ We performed a thorough literature search of four major electronic databases.
⇒ Qualitative evaluation was difficult owing to the lack of high-quality randomised controlled trials and the difficulty in conducting the study during the COVID-19 pandemic.

BACKGROUND

Advance care planning (ACP) is designed to help provide optimal medical care according to the patient's wishes as a part of patient-centred discussions regarding end-of-life care.[1 2] Before the COVID-19 pandemic, to ensure goal-concordant care near the end of life for patients who lack decisional capacity, ACP was performed through early and repeated discussions between patients, their families and relatives, and medical care teams.[3–6] However, the COVID-19 pandemic has profoundly impacted the delivery of care, the lives of patients and their families, and medical and care workers across healthcare institutions.

Following the COVID-19 outbreak, medical staff and healthcare practitioners who had not been trained in ACP recognised the need for such specialised instruction.[7] Furthermore, research has identified many barriers to and facilitators of ACP implementation.[8–10] However, these barriers and facilitators vary depending on the clinical setting and position of the healthcare provider. Therefore, a comprehensive assessment of the barriers to and facilitators of ACP across diverse clinical settings would be helpful for patients, families, healthcare providers, and policymakers, facilitating its delivery. Hence, in this review, we aimed to identify and review the barriers to and facilitators of ACP implementation for medical staff in different settings (eg, hospitals, outpatient palliative care, nursing and care homes) during the pandemic.

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METHODS

We conducted this overview of reviews in accordance with JBI guidelines for umbrella reviews[11]; the reporting followed Preferred Reporting Items for Overviews of Reviews guidelines (online supplemental additional file A).[12]

Eligibility criteria

We included studies if they: (i) were meta-analyses or systematic, scoping, or narrative reviews; (ii) assessed the barriers to or facilitators of ACP after the pandemic; (iii) assessed the pandemic's impact on ACP; (iv) were published in peer-reviewed journals and (v) reviewed studies conducted after the pandemic. We excluded editorials, conference articles, comments and standalone abstracts.

Types of reviews

Overview of reviews: an overview of reviews encompasses systematic reviews or meta-analyses that do not rely on primary sources. This approach consolidates findings from multiple reviews into a single document, focusing on a broad research question or problem.[12] *Systematic review*: a systematic review is an extensive approach that systematically gathers evidence based on specific eligibility criteria to address a specific research question. This type of review adheres to structured and predefined methods to identify, assess and synthesise pertinent literature. Stringent protocols, such as the Preferred Reporting Items for Systematic Reviews and Meta-Analyses statement[13] or the Cochrane Handbook for Systematic Reviews of Interventions,[14] are employed to establish specific inclusion and exclusion criteria. *Meta-analysis*: a meta-analysis is a systematic review that not only presents a narrative summary but also integrates the results from all relevant studies into a single statistical analysis.[13] *Scoping review*: a scoping review aims to comprehensively map the existing literature on a specific topic by identifying key concepts, theories, sources of evidence and research gaps. It is instrumental in identifying areas necessitating further investigation and potential research gaps within the field.[15] *Narrative review*: a narrative review provides a summary and synthesis of the literature on a particular topic but does not adhere to a structured and predefined method for identifying and selecting studies. Narrative reviews are commonly employed to achieve an overall grasp of a subject but are generally considered less rigorous compared with systematic or scoping reviews. *Critical realist review*: a critical realist review adopts a philosophical approach aimed at understanding the causal mechanisms and circumstances by which programmes, policies and interventions work.[16]

Search strategy

We searched the MEDLINE, CENTRAL, Web of Science and Embase databases for studies published between 8 December 2019 and 30 July 2023 without language restrictions by using an online translation tool. We used the following search terms: ((‘advance care planning’ OR ‘advance directive’ OR ‘life-sustaining treatment’ OR ‘end-of-life care’ OR ‘serious illness conversations’) AND ‘COVID-19’ AND ‘review’). A detailed description of the search strategy for each database is provided in online supplemental additional file B.

Study selection

Two authors (RI and KS) independently performed a comprehensive literature screening. Using Covidence (Veritas Health Innovation, Melbourne, Australia), the two authors independently screened all identified titles. Full-text study reports and publications marked ‘included’ were reviewed, and the two authors independently screened these and conducted data extraction. Any discrepancies were assessed by a third author (IM) and resolved through discussion and consensus meetings among all authors.

Data extraction

Data on study characteristics (first author, publication year, review type, setting, used database, number of studies) and barriers to and facilitators of ACP implementation were extracted.

Definition of ACP

ACP is a process that involves discussing and documenting goals and preferences for future medical treatment and care, enabling individuals to make decisions about their healthcare in advance and ensuring that their wishes are known and respected, even if they are unable to communicate them later.[17]

Risk of bias assessment

Two authors (RI and KS) independently assessed the risk of bias using AMSTAR 2.[18] This tool has 16 domains, of which domains 2, 4, 7, 9, 11, 13 and 15 are considered critical. The overall rating is based on weaknesses in critical domains—high: zero or one non-critical weakness; moderate: more than one non-critical weakness; low: one critical flaw with or without non-critical weaknesses; and critically low: more than one critical flaw with or without non-critical weaknesses. Any disagreements were resolved through discussion.

Patient and public involvement statement

No patients or members of the public were involved in this study.

RESULTS

Study selection

The study selection process is summarised in figure 1. Following the screening process, 58 of the 674 identified studies were considered for inclusion, and subsequently, a further 51 studies were excluded because they were not related to ACP,[19–56] not review articles[57–64] and encompassed pre-pandemic studies.[65–69] Finally, we included seven studies—two systematic reviews,[70 71] three scoping

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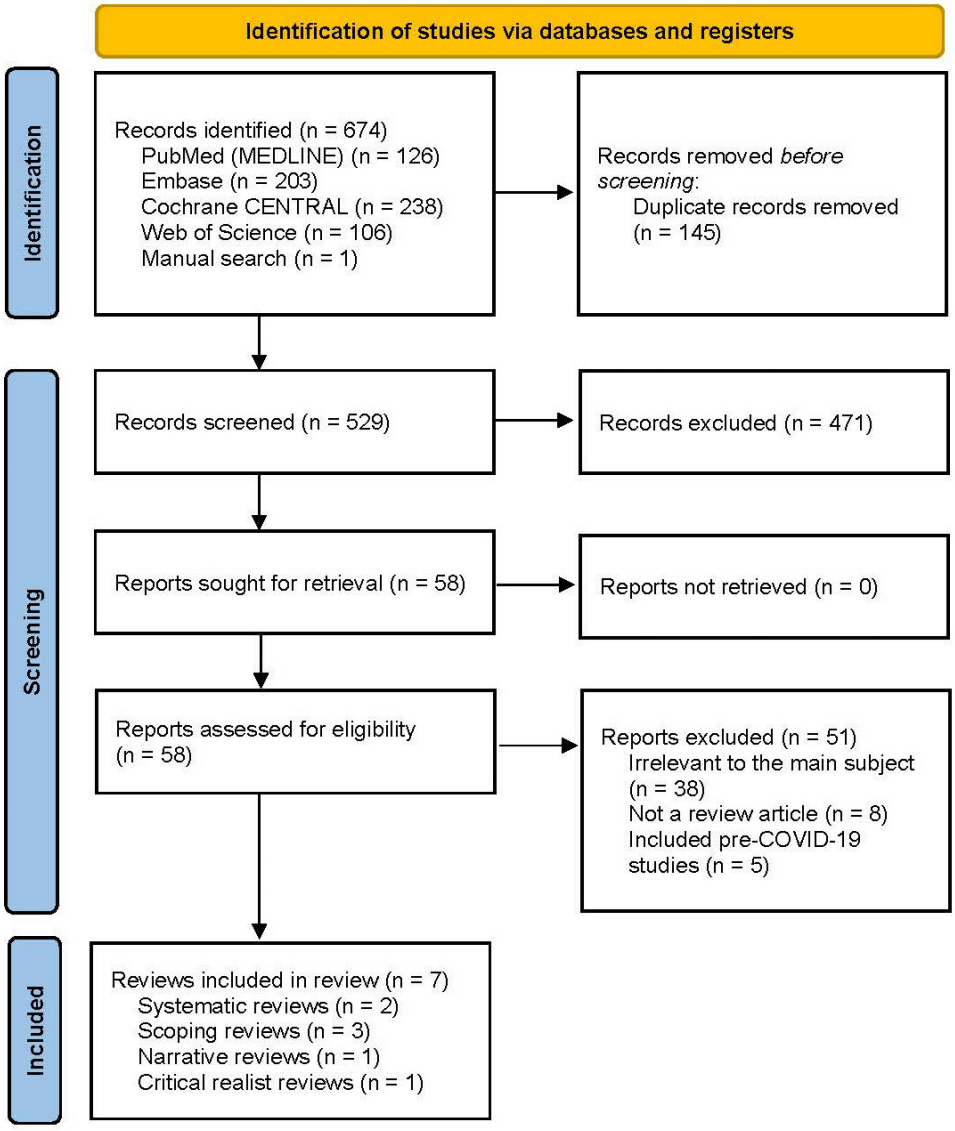

Figure 1 Study selection flowchart.

reviews,[7 72 73] one narrative review[74] and one critical realist review.[75]

Study characteristics

Table 1 shows barriers to and facilitators of discussing or implementing ACP in hospitals, outpatient palliative care settings, care homes and nursing homes providing dementia-focused care.

Barriers to and facilitators of discussing or implementing ACP

The identified barriers to and facilitators of ACP implementation varied across healthcare settings.

Hospitals

The barriers to ACP implementation included visitation restrictions, increased workload, lack of time for communication, restrictions on patient and staff movement, lack of specialist care, and short time until death. Facilitators included support with communication guidance, targeted ACP training, consultations with specialised palliative care teams, shared decision-making using telemedicine and the establishment of special end-of-life care units.

Outpatient palliative care settings

The barriers included a lack of access to outpatient palliative care setting owing to facility closures and supply shortages. The use of telehealth was identified as a facilitator.

Care homes

The barriers to ACP discussions included visitation restrictions, reduced visits from external service staff and staff's fear of transmitting COVID-19. Facilitators included sustained education and emotional support for care home staff and hospital staff home visits.

Nursing homes dealing with dementia

The visitation restrictions and the absence of pre-pandemic ACP discussions were identified as barriers. Facilitators included proactive discussions of possible scenarios and end-of-life care options, collaboration with

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Table 1 Characteristics of the included reviews

Author	Year	Review type	Setting	Used database	Studies (n)	Facilitators	Barriers
Bolt *et al*[72]	2021	Scoping review	People with dementia living in long-term care facilities	PubMed, CINAHL, PsycINFO, Google Scholar	23	▶ Nursing staff collaborating with geriatricians and family doctors to review (existing) advance care plans ▶ Proactively discussing potential scenarios and end-of-life care options ▶ Identifying anticipatory grief and providing information on bereavement preparation during the pandemic ▶ Following up on conversations or calls to respond to psychosocial or spiritual needs or questions regarding care plans ▶ Documenting wishes clearly in transferable (digital) files available and accessible to different care agencies and personnel ▶ Holding joint discussions within the interprofessional care team (including nurses, family doctors or elder care physicians, paramedics and palliative care specialists) ▶ Early discussion of care goals with the patient and within the interprofessional care team, and the revision of care goals when necessary	▶ Visitation restrictions ▶ No advance care planning discussions prior to the pandemic
Hirakawa *et al*[74]	2021	Narrative review	No restriction	PubMed, Google Scholar	20	▶ Advance care planning discussions with both acute and palliative care services ▶ Conducting community-based advance care planning before admission can reduce the burden of healthcare professionals in emergency departments ▶ Providing up-to-date information on the real-time situation of the pandemic at the local level to reduce the number of patients admitted to the hospital ▶ Providing remote advance care planning services and integration thereof into electronic health records ▶ Temporarily pausing legal requirements for advance directive completion, especially in low socioeconomic status households	▶ Lack of coordination between acute, hospital palliative and long-term care units ▶ Hospital emergency departments struggle to provide advance care planning while treating various seriously ill patients ▶ Lack of time and necessity of social distancing ▶ Two adult witnesses are required for advance care planning
Spacey *et al*[70]	2021	Systematic review	Care homes	PubMed, PsycINFO, SCOPUS, CINAHL	9	▶ Providing sustained education and emotional support for stakeholders	▶ Changed clinical routines and fewer visits from external service staff, including general practitioners and specialist palliative care teams ▶ Staff's fear of becoming infected or infecting residents with COVID-19 prevented regular care planning discussions ▶ Significant mental health crisis in the care home workforce

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Table 1 Continued

Author	Year	Review type	Setting	Used database	Studies (n)	Facilitators	Barriers
Lieneck *et al*[71]	2021	Systematic review	Outpatient palliative care	PubMed	18	▲ Using telehealth	▲ Lack of resources and accessibility of care
Gesell *et al*[73]	2021	Scoping review	No restriction	PubMed	280	▲ Using telephones ▲ Using virtual visits	▲ Limitations imposed because of isolation to limit infection/transmission, personal protective equipment and restriction of visitors
Connolly *et al*[7]	2021	Scoping review	Hospital	PubMed, PsycINFO via ProQuest, CINAHL Complete	18	▲ Providing targeted training on advance care planning to clinicians and embedding them within a team led by a palliative care provider ▲ Providing teams' emergency departments, intensive care units and acute care services with discussion tools and accessing consultations with specialist palliative care teams ▲ Palliative care teams seeing every patient with multi-organ failure in intensive care units and communicating with families ▲ A 24-hour/after-hours telephone service providing additional palliative care capacity to primary care teams	▲ Significant increase in patients needing specialist palliative and end-of-life care ▲ Shorter average time until death
Spacey *et al*[75]	2023	Critical realist review	Care homes	MEDLINE, PsycINFO, SCOPUS, CINAHL	11	▲ High-quality online training and information for care home staff and relatives ▲ Communicating remotely	▲ Visitation restrictions ▲ For care home staff, computer skills and time were barriers to training

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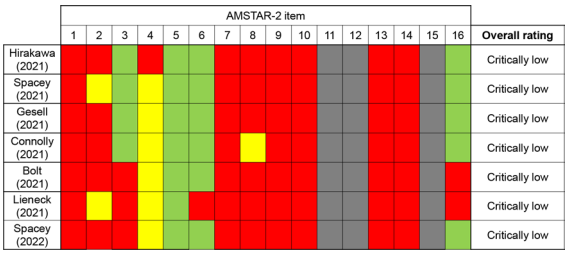

Figure 2 Summary of the risk of bias. Yes: green, partially yes: yellow, no: red, no MA conducted: grey. MA, meta-analysis.

geriatricians and family physicians, and recording ACP strategies in digital files.

Other settings

The barriers included legal requirements for ACP discussions, while facilitators included the establishment of telecommunications, up-to-date information on the pandemic and community-based ACP discussions. Furthermore, the sharing of electronic ACP documents and legal arrangements for obtaining ACP enabled the provision of appropriate care in hospitals, clinics and ambulance services.

Risk of bias

Figure 2 shows the outcomes of the risk of bias assessment. All studies were assessed as being of critically low quality because they had more than one critical flaw with or without non-critical weaknesses (online supplemental additional file C).

DISCUSSION

Main findings

In this study, we identified common and unique barriers to and facilitators of ACP implementation across various settings during the COVID-19 pandemic.

The common barriers to ACP implementation included restrictions on visitations; limited resources and personnel; and a lack of coordination between hospitals, facilities, outpatient clinics and home visits. Furthermore, the dearth of palliative care physicians in hospitals and the psychological burden on facility staff were common across studies.

A common facilitator of ACP implementation was the use of telemedicine to share ACP information with staff, patients, families and relatives. Short-term training in palliative care and palliative care physicians joining the acute care team and conducting consultations with families and staff in hospitals, as well as ACP education and emotional support for staff in facilities, were identified as facilitators.

This is the first study to review the barriers and facilitators related to implementing ACP across diverse healthcare settings following the COVID-19 pandemic. This understanding of setting-specific factors may be useful for staff, facility stakeholders and policymakers.

What this study adds

The outbreak of COVID-19 led to (i) a disjunction not only between outpatient facilities and hospitals but also within hospital departments and (ii) the depletion of staff, equipment and space.

Pre-pandemic challenges in ACP provision have been well documented; these include a lack of engagement and reluctance to initiate conversations among home care staff,[76 77] insufficient knowledge and skills of care home staff,[78 79] low uptake of care planning (particularly for residents with some level of cognitive impairment),[80] physicians' preference for physician-centred informed consent over patient-centred ACP[81] and the fact that the majority of patients lack the capacity to make medical treatment decisions themselves before death.[82] COVID-19 brought these problems to the fore, necessitating discussions regarding ACP and placing a significant burden on home care staff and healthcare providers. This study highlights several possible means by which ACP uptake might increase.

Data sharing

Acute care units, hospital palliative care units and facility staff must collaborate and establish a system to promptly share ACP information. Ideally, ACP information obtained at each facility should be included in a system that is accessible to health professionals across settings.[8] During the pandemic, telemedicine began to be, promoted in clinics providing home visit services and in underpopulated areas owing to infrastructural advancements and progress in legislation,[83] and its use has the potential to facilitate ACP discussions.[75] However, funding for information-sharing systems and telemedicine capability is required in hospitals and facilities that do not have the appropriate infrastructure; therefore, the government should incorporate telemedicine into its policies to ensure that it is both carried out and receives sustainable support.

Staff education

Our findings indicate that hospitals need short-term education programmes on ACP for palliative care providers. Furthermore, palliative care physicians should be part of the acute care team, where they can help provide ongoing education and support. Hospitals with many palliative care physicians may find it useful to allocate some of them to acute care teams, establish a 24-hour palliative care consultation system for families and medical staff, and have these physicians visit local facilities for educational purposes. However, hospitals with fewer palliative care physicians should consider implementing short-term ACP training programmes to reduce the psychological burden on facility staff. ACP skills or upgrading skills through training resources such as VitalTalk may be an option for hospitals and facilities that do not have palliative care physicians.

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Community-based ACP

Community-based ACP, conducted before a person is admitted to a care facility, can facilitate end-of-life discussions, and motivate patients to complete their ACP forms.[84] As such, early dissemination of ACP will be necessary, especially among older adults.

Regarding the characteristics of COVID-19, rapid disease progression, clinical deterioration and death, along with the strict measures taken to restrict disease transmission and infection, resulted in facility staff having insufficient time to adequately engage with patients. High levels of sickness among medical workers led to shortages that challenged staff capacity[85–87] and may also have contributed to the difficulty in implementing ACP.[7] Thus, this review suggests that the experience of the pandemic highlighted the need for ACP education for staff in hospitals and home care facilities, a telemedicine-based system for real-time sharing of ACP information across hospitals and facilities, and discussions about ACP in the community.

Risk of bias

We found the included reviews to be at high risk of bias. However, studies on ACP have several inherent biases: they cannot be blinded; the patients' conditions may change or they may die during ACP discussions; the soft nature of study outcomes (eg, patient and family satisfaction); the outcomes are influenced by unmeasured factors such as the relationship between the attending physician/staff and the patient/family; and the understanding of and satisfaction with ACP vary depending on the facilities, the disease and its progression, social background, religion and ethnicity. Hence, studies on ACP tend to be rated as low quality when evaluated using the risk of bias as a guideline. Furthermore, we presented an overview of an aggregate of review studies following the COVID-19 pandemic. During the pandemic, intervention studies could not be conducted owing to a lack of medical resources and ethical concerns; thus, many collected reviews focused on single-centre observational studies, leading to the quality being judged as low. As such, further research evaluating the effective implementation of ACP during a pandemic is necessary.

Limitations

First, as described above, the risk of bias in the included studies was high, as it was difficult to conduct high-quality randomised controlled trials or studies comparing ACP implementation during the pandemic. Despite this limitation, this study's review of barriers and facilitating factors can still be useful as a reference for institutions to improve ACP practice. Second, this overview of reviews included data collected from numerous hospitals and facilities in different countries, which also exhibited varied and changing responses to the pandemic. Moreover, our effort to identify the barriers and facilitating factors from heterogeneous data provides a foundation for a deeper understanding of what works, for whom, and in what circumstances.

CONCLUSION

Challenges in the provision of ACP have long been acknowledged, but the COVID-19 pandemic brought them to light. The findings of this overview of reviews can help promote effective ACP implementation in care facilities.

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Contributors RI conceived the study. RI and KS conducted the review and data collection. IM assessed all discrepancies. RI wrote the first draft of the manuscript. KH, IM, YS, AS, TM, TS and NT critically revised the manuscript. All authors approved the final version of the manuscript. The corresponding author, as guarantor, accepts full responsibility for the finished article has access to any data and controlled the decision to publish. The corresponding author attests that all listed authors meet the authorship criteria and that no others meeting the criteria have been omitted.

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